

2. (Amended) The semiconductor device of claim 1, wherein the first region of the gate electrode has a composition ratio of the second group IV element gradually reduced in accordance with a distance from the insulating gate film.

3. (Amended) The semiconductor device of claim 1, wherein the first region of the gate electrode has a composition ratio of the second group IV element stepwise reduced in accordance with a distance from the insulating gate film.

a1
Sub 72

4. (Amended) A semiconductor device comprising:
an insulated gate field effect transistor comprising a pair of main electrodes used as a source and drain electrodes, an insulating gate film adjacent to the pair of main electrodes, and a gate electrode comprising a first region composed of at least a first group IV element and a second group IV element and formed in contact with the insulating gate film, and a second region composed of the first group IV element and formed on the first region; and a silicide electrode formed in contact with the second region of the gate electrode, and being substantially free from the second group IV element.

5. (Amended) The semiconductor device of claim 4, wherein the first group IV element of the gate electrode is Si (silicon), the second group IV element of the gate electrode is Ge (germanium), and the silicide electrode is composed of a CoSi_x or TiSi_x layer which is substantially free from Ge.

6. (Amended) The semiconductor device of claim 5, wherein the first region of the gate electrode has a thickness larger than a width of a depletion layer of the gate electrode composed of Si.

7. (Amended) The semiconductor device of claim 6, wherein a composition ratio of Ge of the first region of the gate electrode is at least 0.1 or larger.

8. (Amended) The semiconductor device of claim 7, wherein the gate electrode contains at least B (boron).

9. (Amended) The semiconductor device of claim 7, wherein the gate electrode contains at least As (arsenic).

Al End
10. (Amended) The semiconductor device of claim 4, wherein the first group IV element of the gate electrode is Si, the second group IV element of the gate electrode is C (carbon), and the silicide electrode is composed of a CoSi_x or TiSi_y layer which is substantially free of C.

Sub B2
11. (Amended) A semiconductor device comprising:
an insulated gate field effect transistor having a pair of main electrodes used as source and drain electrodes, an insulating gate film adjacent to the pair of main electrodes, and a gate electrode comprising a first region composed of at least a first group IV element and a second group IV element and formed in contact with the insulating gate film, and a second region composed of a multiple element compound including at least the first and second group IV elements and metal, and formed on the first region; and
a silicide electrode formed in contact with the second region of the gate electrode, composed of the first group IV element and metal, and being substantially free from the second group IV element.

Sub B4
15. (Amended) A semiconductor device comprising:
a semiconductor region of a first conductivity type;
an epitaxial growth layer formed on the semiconductor region and having a first region of the first conductivity type composed of at least a first group IV element and a second group IV element and formed in contact with the semiconductor region and a second region of the first conductivity type composed of the first group IV element and formed in contact with the first region; and
a silicide electrode formed on the second region of the epitaxial growth layer.

16. (Amended) The semiconductor device of claim 15, wherein the semiconductor region is a source or drain electrode of the insulated gate field effect transistor, and the epitaxial growth layer is an elevated source or drain electrode.

17. (Amended) The semiconductor device of claim 16, wherein the first group IV element of the elevated source or drain electrode is Si, the second group IV element of the elevated source or drain electrode is Ge, and the silicide electrode is made of a CoSi_x or TiSi_x layer which is substantially free from Ge.

Ad End 18. (Amended) The semiconductor device of claim 17, wherein a composition ratio of Ge in the first region of the elevated source or drain electrode is at least 0.1 or more, and a thickness of the first region is at least 2nm from the semiconductor region.

19. (Amended) The semiconductor device of claim 18, wherein the elevated source or drain electrode contains at least B.

20. (Amended) The semiconductor device of claim 18, wherein the elevated source or drain electrode contains at least As.

21. (Amended) The semiconductor device of claim 16, wherein the first group IV element of the elevated source or drain electrode is Si, the second group IV element of the elevated source or drain electrode is C, and the silicide electrode made of a CoSi_x or TiSi_x layer which is substantially free from C.

Sub 23. (Amended) A semiconductor device comprising:
an insulated gate field effect transistor having a pair of main electrodes used as source and drain electrodes, an insulating gate film adjacent to the pair of main electrodes, and a gate electrode comprising a first region composed of at least a first group IV element and a second

Sub B6
a3
enc
group IV element and formed in contact with the insulating gate film, and a second region composed of the first group IV element and formed on the first region;

a respective elevated electrode formed on the main electrodes, and having a third region composed of a third group IV element and a fourth group IV element and a fourth region formed on the third region and composed of the third group IV element;

a first silicide electrode formed in contact with the second region of the gate electrode, and being substantially free from the second group IV element; and

a second silicide electrode formed in contact with the fourth region of the elevated electrode, and being substantially free from the fourth group IV element.

Sub B6
a3
enc
25. (Amended) The semiconductor device of claim 1, wherein a layer is added between the insulating gate film and the first region of the gate electrode, is thinner than the first region, and is composed of the first group IV element or the second group IV element.

26. (Amended) The semiconductor device of claim 4, wherein a layer is added between the insulating gate film and the first region of the gate electrode, is thinner than the first region, and is composed of the first group IV element or the second group IV element.

27. (Amended) The semiconductor device of claim 11, wherein a layer is added between the insulating gate film and the first region of the gate electrode, is thinner than the first region, and is composed of the first group IV element or the second group IV element.

Please add the following new claims 28-31:

Sub B7
a3
enc
28. (New) A semiconductor device comprising:
an insulated gate field effect transistor having a pair of main electrodes used as source and drain electrodes of a first conductivity type, an insulating gate film adjacent to the a pair of main electrodes, and a gate electrode comprising a first region composed of at least a first group IV element and a second group IV element and formed in contact with the insulating gate film, and a second region composed of the first Group IV element and formed in contact with the first region;

Sub B7
a respective elevated electrode of the first conductivity type formed on the main electrodes, and having a third region composed of a third Group IV element and a fourth Group IV element and formed in contact with the respective main electrodes, and a fourth region formed in contact with the third region and composed of the third Group IV element;

a first silicide electrode formed in contact with the second region of the gate electrode, and being substantially free from the second Group IV element; and

a second silicide electrode formed in contact with the fourth region of the elevated electrode, and being substantially free from the fourth Group IV element.

AS End
29. (New) The semiconductor device of claim 25, wherein a thickness of the layer is approximately 1nm or less.

30. (New) The semiconductor device of claim 26, wherein a thickness of the layer is approximately 1nm or less.

31. (New) The semiconductor device of claim 27, wherein a thickness of the layer is approximately 1nm or less.
